# BRUHAT BANGALORE MAHANAGARA PALIKE
Yelahanka Zone, Electrical Division

Office of the Executive Engineer
Electrical Division, Yelahanka Zone
Bruhath Bengaluru Mahanagara Palike

## "Schedule-B"

**Name of work :-** Providing LED Street lights/Control switches/control wires at Dark/vulnerabale places in Ward no 06,07&08.

| Qty | Description Of Work | Unit | Quoted Rates | In figures |
|---|---|---|---|---|
| 1 | 1189 | Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation, Lamp compartment comprising of anti glare clear diffuser with injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 90 Watts | Nos | 7513.5 | Rupees Seven Thousand Five Hundred Thirteen And Paise Fifty Only |
| 2 | 1190 | Supplying and Fixing of mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G.I.Pipe | Each | 877.1 | Rupees Eight Hundred Seventy Seven And Paise Ten Only |
| 3 | 1225 | Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires. | Each | 185 | Rupees One Hundred Eighty Five Only |
| 4 | 3400 | Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring.4 sqmm | Mtrs | 9.5 | Rupees Nine And Paise Fifty Only |
| 5 | 36 | Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. ( Icu = Ics) 100Amps 25kA. | Each | 4754 | Rupees Four Thousand Seven Hundred Fifty Four Only |

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| 6 | 36 | Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop- Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.260mmx210mmx116mm | Each | 2155 | Rupees [redacted] Thousand One Hundred Fifty Five Only |
| 7 | 500 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm | Mtrs | 156 | Rupees One Hundred Fifty Six Only |
| 8 | 500 | Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure 6 sqmm to 16 sqmm | Mtrs | 31 | Rupees Thirty One Only |
| 9 | 30 | Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility.300mmx450mmx214mm | Each | 5381 | Rupees Five Thousand Three Hundred Eighty One Only |
| 10 | 30 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.50-63 Amps SP | Each | 759 | Rupees Seven Hundred Fifty Nine Only |
| 11 | 30 | Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.100 to 125Amps | Each | 7554 | Rupees Seven Thousand Five Hundred Fifty Four Only |
| 12 | 30 | Supplying, fixing and wiring rotary selector switch suitable for Voltmeter.(Togal switch) | Each | 140 | Rupees One Hundred Forty Only |
| 13 | 16 | Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip | Mtrs | 78 | Rupees Seventy Eight Only |
| 14 | 15 | Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.6 sqmm | Mtrs | 73 | Rupees Seventy Three Only |
| 15 | 150 | Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes.6 sqmm | Each | 7.3 | Rupees Seven And Paise Thirty Only |
| 16 | 4 | Supply of RCC Pole - 9 Mtr Long, 145 Kg WL (Dwg No.BESCOM/GM/QS&S/02 Dtd 24.11.2018) as per IS-785 | Nos | 6565 | Rupees Six Thousand Five Hundred Sixty Five Only |
| 17 | 4 | Digging of Pits 1.8 mtr depth for errection of 9 to 10 mtr Long Steel/RCC/PSC supports as per approved Drawing.<br>1)Ordinary Soil | Per Pit | 436 | Rupees Four Hundred Thirty Six Only |
| 18 | 4 | Supply of LT 2 Pin X Arms - MS<br>(Dwg No. BESCOM/GM/QS&S/32 Dtd 24.11.2018) | Nos | 91 | Rupees Ninety One Only |

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| | | Erection of steel supports 9.0 to 10.00 mtr long such as 22.68 kg (50 lbs) Rail, 27.22 kg (60 Lbs) Rail I Beam of sizes 200x100mm, 175x90 mm, 125x100 mm. Fabricates poles tubular poles in pits of 1.8 mtr Depth, Aligning, Refilling with soil and ramming as approved drawing | Nos | 350 | Rupees Three Hundred Fifty Only |
| | 2.5 | 1.1 kV, LT Aerial Bunched Cable, confirming to IS-14255: 1995 XLPE insulation Parameter shall be as below<br>1. Hot Set Test:<br>a) Elongation under Load: 50% (Max)<br>b) Permanent Elongation After Cooloing: 3% (Max)<br>2. Thermal Aging in oven:<br>a) Tensile Strength: 16 N/mm$^2$ (Min)<br>b) Elongation: 375% (Min)<br>3. Water Absorption Test<br>a) Water absorbed: 0.5 mg/cm$^2$ (Max)<br>4. Carbon Black Content shall be ranging from 2% to 3%<br>(Insulated Messenger cum Neutral) 3x25 + 1x25 + 1x16 Sqmm Street light | KM | 154247.1 | Rupees One Lakh(s) Fifty Four Thousand Two Hundred Forty Seven And Paise Ten Only |
| 21 | 2.5 | Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x25) (Street Light Control) | KM | 23576.7217 | Rupees Twenty Three Thousand Five Hundred Seventy Six And Paise Seventy Two Only |
| 22 | 15 | Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7.Erection of heavy duty pole on Footpath / median10Mt (5Mt Hb,165.1mm dia 4.85mm thick x3M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 47 | Each | 17544.296 | Rupees Seventeen Thousand Five Hundred Forty Four And Paise Thirty Only |
| 23 | 15 | Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 Mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessoriesSingle bracket 1.5 Mtr. Length | Each | 1259.16 | Rupees One Thousand Two Hundred Fifty Nine And Paise Sixteen Only |

I am prepared to take up the above work at rates quoted in the Schedule 'B'

For SHAH ELECTRICALS

Contractor

Proprietor

EXECUTIVE ENGINEER (ELEC)
BBMP, Yelahanka Zone